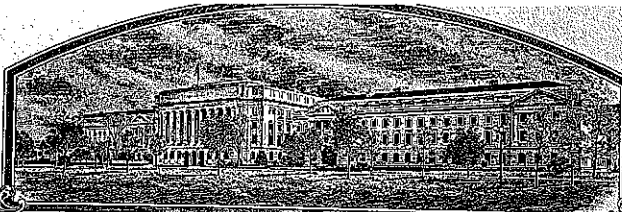


No.

200000231



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Cebeco Seeds B. H.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREBY ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE SEED. (U.S. STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BARLEY

'Jersey'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this second day of April, in the year two thousand two.



Attest:

Paul M. Jacobson

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Benjamin

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)

MAH
2/27/02


1. NAME OF OWNER CEBECO ZADEN BV SEEDS B.V.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME CEBECO 9538	3. VARIETY NAME JERSEY
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) PDB 10000 5250 GA Vlijmen The Netherlands		5. TELEPHONE (include area code) +31 73 51 88 555	FOR OFFICIAL USE ONLY PVPO NUMBER 200000231
		6. FAX (include area code) +31 73 51 88 666	FILING DATE MAY 8, 2000
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)	8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION (First person listed will receive all papers)			FILING AND EXAMINATION FEES: FEE: 2450.00 DATE: 5-8-2000 CERTIFICATION FEE: FEE: 320.00 DATE: 1-14-02
11. TELEPHONE (include area code)	12. FAX (include area code)	13. E-MAIL	14. CROP KIND (Common Name) Spring barley
15. GENUS AND SPECIES NAME OF CROP Hordeum vulgare L.		16. FAMILY NAME (Botanical) Graminae	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 63(a) of the Plant Variety Protection Act. <input checked="" type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input type="checkbox"/> NO (If "no", go to item 22)	
		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
		21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED 1 gen. 0	
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES France 1999 (spring) NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input checked="" type="checkbox"/> YES EU, 1999 <input type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) CEBECO ZADEN B.V. Vlijmen, Holland (use of this name can jeopardize protection and result in penalties).			
SIGNATURE OF OWNER  Ir. Bert Scholte		SIGNATURE OF OWNER	
NAME (Please print or type) Ir. Bert Scholte		NAME (Please print or type)	
CAPACITY OR TITLE Head Registration Dept.	DATE April 18, 2000	CAPACITY OR TITLE	DATE

EXHIBIT A**Origin and Breeding History of Cebeco 9538 (Jersey) (Hordeum vulgare L.)****1. Genealogy**

Cebeco 9538 is selected out of the following crossing:

Apex * Alexis in 1990. Seed of both Apex and Alexis is available on the market.

In 1992 a single plant was selected in the F3, followed by line selection and replicated yield trials.

The breeding process was carried out at our breeding station in Lelystad in the Center of the Netherlands. Our breeding station is situated on 150 ha reclaimed land on heavy clay soil and is equipped with all the necessary facilities including lab facilities and greenhouses.

2. Breeding goals

The breeding goals were:

<u>Generation</u>	<u>Criteria for selection</u>
F2 plant selection	General type
F3 line selection	Diseases Malting quality
F4 line selection	Diseases Agronomic characteristics Malting quality Yield
F5 line selection	Diseases Agronomic characteristics Malting quality Yield
F6 line selection	Diseases Agronomic characteristics Malting quality Yield

Exhibit A-bis

Evidence of Uniformity and Stability of Cebeco 9538 (Jersey) (Hordeum vulgare L.)

Jersey has been tested in official DUS trials in France in the years 1997-1998. Based on the results from these trials The French authorities have concluded the following:

1. During the testing years no variants were observed, thus confirming the Uniformity of Jersey.
2. Over the years Jersey has proven to be a Stable variety.

Exhibit B
Statement of Distinctness of of Cebeco 9538 (JERSEY) (Hordeum vulgare L.)

Jersey has been found Distinct from all other known varieties but is most similar to Baronesse. However Jersey can be distinguished from Baronesse in the characteristics, as described in the following table. The data in this table have been recorded in trials on our breeding station in Lelystad, the Netherlands.

		Jersey	Baronesse	
Character				
Mildew resistance	1995	1	7	scale: 1 = resistant 9 = susceptible
	1996	1	7	
	1997	1	7	
Standing ability				
	1996	2	7	scale: 1 = 100 % standing 9 = 100 % lodged
	1997	4	8	
	1998	2	7	
Plant height	1995	80	93	scale: centimeters
	1996	89	95	

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Barley)

OBJECTIVE DESCRIPTION OF VARIETY
BARLEY (*HORDEUM VULGARE*)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

CEBECO ZADEN BV

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

POB 10000

5250 GA Vlijmen - The Netherlands

FOR OFFICIAL USE ONLY

PVPO NUMBER

200000231

VARIETY NAME OR TEMPORARY

DESIGNATION CEBECO 9538-JERSEY

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (i.e. or) when number is either 99 or less or 9 or less.

1. GROWTH HABIT:

1 - SPRING 2 - FACULTATIVE WINTER 3 - WINTER Early Growth: 1 - PROSTRATE 2 - SEMIPROSTRATE
3 - ERECT

2. MATURITY (50% Flowering):

1 - EARLY (California Mariout) 2 - MIDSEASON (Betzes) 3 - LATE (Frontier)

No. of days Earlier than } 1 - BETZES 2 - CALIFORNIA MARIOUT 3 - CONQUEST 4 - DICKSON
Baronesse
 No. of days Later than } 5 - PIROLINE 6 - PRIMUS 7 - UNITAN

3. PLANT HEIGHT (From soil level to top of head):

1 - SEMIDWARF 2 - SHORT (California Mariout) 3 - MEDIUM TALL (Betzes) 4 - TALL (Conquest)

9 Baronesse } 1 - BETZES 2 - CALIFORNIA MARIOUT 3 - CONQUEST 4 - DICKSON
Cm. Shorter than } 5 - PIROLINE 6 - PRIMUS 7 - UNITAN
 Cm. Taller than }

4. STEM:

Exsertion (Flag to spike at maturity): 1 - 0 - 3 cm. 2 - 3 - 10 cm. Anthocyanin: 1 - ABSENT 2 - PRESENT
3 - 10 - 15 cm.

NO. OF NODES (Originating from node above ground)

Collar Shape: 1 - CLOSED 2 - V-SHAPED 3 - OPEN Shape of Neck: 1 - STRAIGHT 2 - SNAKY
4 - MODIFIED CLOSED OR OPEN 3 - OTHER (Specify) _____

5. LEAF:

Basal leaf sheath (seedling): 1 - GLABROUS 2 - PUBESCENT Position of flag leaf (at boot stage): 1 - DROOPING
2 - UPRIGHT

Waxiness: 1 - ABSENT (Glossy) 2 - SLIGHTLY WAXY 3 MM. WIDTH (First leaf below flag leaf)
3 - WAXY

7 CM. LENGTH (First leaf below flag leaf) Anthocyanin in leaf sheath: 1 - ABSENT 2 - PRESENT

6. HEAD:

Type: 1 - TWO-ROWED 2 - SIX-ROWED Density: 1 - LAX 2 - ERECT (Not dense)
3 - ERECT (Dense)

Shape: 1 - TAPERING 2 - STRAP 3 - CLAVATE Waxiness: 1 - ABSENT (Glossy) 2 - SLIGHTLY WAXY
4 - OTHER (Specify) _____ 3 - WAXY

3/3 Lateral Kernels Overlap: 1 - NONE 2 - AT TIP Rachis (Hair on edge): 1 - LACKING 2 - FEW 3 - COVERED
3 - 1/4 - 1/2 OF HEAD

7. GLUME:

Length: 1 - 1/3 OF LEMMA 2 - 1/2 OF LEMMA Hairs: 1 - NONE 2 - SHORT 3 - LONG
3 - MORE THAN 1/2 OF LEMMA

Hair covering: 1 - NONE 2 - RESTRICTED TO MIDDLE 3 - CONFINED TO BAND 4 - COMPLETELY COVERED

Awns: 1 - LESS THAN EQUAL TO LENGTH OF GLUMES 2 - EQUAL TO LENGTH OF GLUMES
3 - MORE THAN EQUAL TO LENGTH OF GLUMES

Awn Surface: 1 - SMOOTH 2 - SEMISMOOTH 3 - ROUGH

8. LEMMA:

☒ Awn: 1 = AWNLESS 2 = AWNLETS ON CENTRAL ROWS, AWNLESS ON LATERAL ROWS
3 = SHORT ON CENTRAL ROWS, AWNLETS ON LATERAL ROWS 4 = SHORT (less than equal to length of spike)
5 = LONG (longer than spike) 6 = HOODED

☒ Awn Surface: 0 = AWNLESS 1 = SMOOTH 2 = SEMISMOOTH 3 = ROUGH

☒ Teeth: 1 = ABSENT 2 = FEW 3 = NUMEROUS ☒ Hair: 1 = ABSENT 2 = PRESENT

☒ Shape of base: 1 = DEPRESSION 2 = SLIGHT CREASE 3 = TRANSVERSE CREASE ☒ Rachilla Hairs: 1 = SHORT 2 = LONG

9. STIGMA:

☐ Hairs: 1 = FEW 2 = MANY

10. SEED:

☒ Type: 1 = NAKED 2 = COVERED ☒ Hairs on Ventral Furrow: 1 = ABSENT 2 = PRESENT

☒ Length: 1 = SHORT (8.0 mm.) 2 = SHORT TO MIDLONG (7.5 - 9.0 mm.) 3 = MIDLONG (8.5 - 9.5 mm.)
4 = MIDLONG TO LONG (9.0 - 10.5 mm.) 5 = LONG (10.0 mm.)

☒ Wrinkling of hull: 1 = NAKED 2 = SLIGHTLY WRINKLED 3 = SEMIWRINKLED 4 = WRINKLED

☒ Aleurone Color: 1 = COLORLESS (White or Yellow) 2 = BLUE

☐ PERCENT ABORTIVE ☒ 47 GMS. PER 1000 SEEDS

11. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> SEPTORIA	<input checked="" type="checkbox"/> NET BLOTCH	<input type="checkbox"/> SPOT BLOTCH	<input checked="" type="checkbox"/> POWDERY MILDEW
<input type="checkbox"/> LOOSE SMUT	<input type="checkbox"/> BACTERIAL BLIGHT	<input type="checkbox"/> COVERED SMUT	<input type="checkbox"/> FALSE LOOSE SMUT
<input type="checkbox"/> STEM RUST	<input checked="" type="checkbox"/> LEAF RUST	<input type="checkbox"/> SCAB	<input checked="" type="checkbox"/> SCALD
<input type="checkbox"/> AY	<input type="checkbox"/> BSMV	<input checked="" type="checkbox"/> BYDV	<input type="checkbox"/> OTHER (Specify)

12. INSECT: (0 = Not tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> GREEN BUG	<input type="checkbox"/> ENGLISH GRAIN APHID	<input type="checkbox"/> CHINCH BUG	<input type="checkbox"/> ARMYWORM
<input type="checkbox"/> GRASS HOPPERS	<input type="checkbox"/> CERIAL LEAF BETTLE	<input type="checkbox"/> OTHER (Specify)	
HESSIAN FLY RACES		<input type="checkbox"/> GP	<input type="checkbox"/> A
		<input type="checkbox"/> B	<input type="checkbox"/> C
		<input type="checkbox"/> D	<input type="checkbox"/> E
		<input type="checkbox"/> F	<input type="checkbox"/> G

13. CHEMICAL (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☐ DDT ☐ OTHER (Specify)

14. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED: Baronesse

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering		Seed size	
Leaf size		Coleoptile elongation	
Leaf color		Seedling pigmentation	
Leaf carriage			

REFERENCES: The following publications may be used as a reference aid for the standardization of character descriptions and terms used in this form:

1. Wiebe, G. A., and D. A. Reid, 1961, Classification of Barley Varieties Grown in the United States and Canada in 1958, Technical Bulletin No. 1224, U.S. Dept. of Agriculture.
2. Reid, D. A., and G. A. Wiebe, 1968, Barley: Origin, Botany, Culture, Winter Hardiness, Genetics, Utilization, Pests, Agriculture Handbook No. 338, U.S. Dept. of Agriculture. pp. 61 - 84.
3. Malting Barley Improvement Association, Milwaukee, Wisconsin, 1971, Barley Variety Dictionary.

COLOR: Nickerson's or any recognized color fan may be used to determine color of the described variety.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)

mail
2/27/02
CEBECO ZADEN BV SEEDS B.V.

2. TEMPORARY DESIGNATION
OR EXPERIMENTAL NUMBER

CEBECO 9538

3. VARIETY NAME

JERSEY

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)

POB 10000
5250 GA Vliijmen - NL

5. TELEPHONE (include area code)

+31 73 51 88 555

6. FAX (include area code)

+31 73 51 88 666

7. PVPO NUMBER

200000231

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

If no, give name of country The Netherlands

☐ YES ☒ NO

10. Is the applicant the original breeder? If no, please answer the following:

☒ YES ☐ NO

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country _____

☐ YES ☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country _____

11. Additional explanation on ownership (If needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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